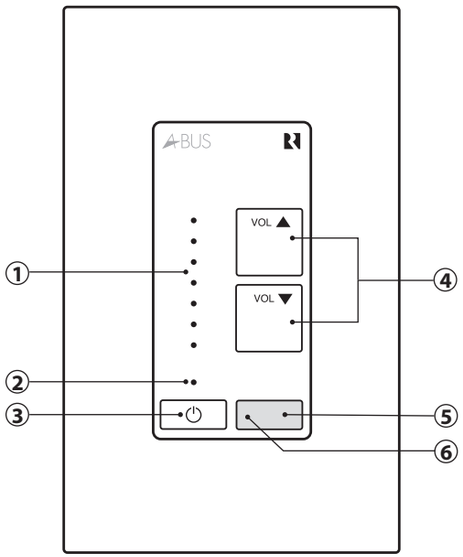
A-K4 Keypad Front Panel Operation



A-K4 Keypad

① **Volume Level** - Volume level indicator LEDs light up from bottom to top to indicate volume level. Also indicates source selected (1-6) when in "multi-source" mode.

② **Status LED** - Green LED lights to show Status "on" and turns off when Status is "off"

③ **Power** - Turns zone ON when pressed once. (In multisource mode, when ON, press and hold will turn zone OFF. When OFF, press and hold will turn OFF all zones.) Status LED remains lit when keypad/zone is OFF if any other zone in system is ON.

③ **Source select** (Multisource controller) - When the keypad is set in "Multisource" mode, the power button is used to toggle through and select a source. Tap the power button to toggle between 1 and 6 multiple sources (once power is on). The top LEDs of the volume indicator show (from top to bottom) the source that is selected (top LED is source 1, next LED down is
source 2, etc).

④ **Volume Up/Down** - Raises/lowers room volume

⑤ **IR Receiver** - Receives IR signals from a remote control. Source components attached to IR emitters in an A-BUS system can be controlled with their own remote controls or A-LRC2 learning remote aimed at the A-K4.

⑥ **IR Confirmation LED** - Red LED blinks to confirm IR signal reception.

Safety Instructions

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions - The safety and operating instructions should be retained for future reference.

3. Heed Warnings - All warnings on the appliance in the operating instructions should be adhered to.

4. Follow Instructions - All operating and user instructions should be followed.

5. Water and Moisture - The appliance should not be used near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

6. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

7. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

8. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

9. Grounding or Polarization - Precaution should be taken so that the grounding or polarization means of an appliance is not defeated.

10. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.

11. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:

The power supply cord or the plug has been damaged;
Objects have fallen, liquid has been spilled into the appliance
The appliance has been exposed to rain
The appliance does not appear to operate normally
The appliance has been dropped or the enclosure is damaged.

12. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

13. Care – From time to time you should wipe off the front panel with a soft dry cloth.

Warranty and Repair

The Russound A-K4 is fully guaranteed against all defects in material-sand workmanship for two (2) years from the date of purchase. During this period, Russound will replace any defective parts and correct any defect in workmanship without charge for either parts or labor. For this warranty to apply, the unit must be installed and used according to its written instructions. If service is necessary, it must be performed by Russound. The unit must be returned to Russound at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damage resulting from abuse or from servicing by an agency or person not specifically authorized in writing by Russound. This Warranty does not cover: Damage caused by abuse, accident, mis-use, negligence, or improper installation or operation; Power surges and lightning strikes; Normal wear and maintenance; Products that have been altered or modified; Any product whose identifying number, decal, serial number, etc. has been altered, defaced or removed. Russound sells products only through authorized Dealers and Distributors to ensure that customers obtain proper support and service. Any Russound product purchased from an unauthorized dealer or other source, including retailers, mail order sellers and online sellers will not be honored or serviced under existing Russound warranty policy. Any sale of products by an unauthorized source or other manner not authorized by Russound shall void the warranty on the applicable product.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis or the retail value of the parts and labor. To return for repairs, the unit must be shipped to Russound at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the unit in a corrugated container with at least three (3) inches of resilient material to protect the unit from damage in transit. Before returning a unit for repair, call Russound at 866.888.7466 for a Return Authorization number. Write this number on the shipping label and ship to: Russound, ATTN: Service, 5 Forbes Road, Newmarket, NH03857.

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Russound®

A-BUS®

A-K4

Amplified Keypad with Multisource Capability for A-BUS® System

Installation Manual

A-K4 Overview

The Russound A-K4 is an in-wall amplified keypad used with A-BUS hubs and controllers in a distributed audio system. It can be used with both single and multisource A-BUS hubs/controllers. The A-K4 provides source selection and control with backlit push buttons, plus an IR window to receive remote control signals.

The volume up/down buttons control the speakers in the room that are connected to the A-K4. Typical installations place one A-K4 in each room of the A-BUS system. The Line Out connection on the A-K4 can be used to feed a separate powered subwoofer or to connect an external amplifier for more power to a larger listening area.

A-K4 Key Features

- Power On/Off button (acts as source select with multi-source hubs/controllers)
- Volume trims for L/R balance and maximum level settings
- Built-in IR receiver with IR confirmation LED
- IR control of settings and sources via A-LRC2 optional remote
- Line Out connection for external amp or powered subwoofer
- White backlit buttons

A-K4 Specifications

Output Impedance:	8 ohms/channel (1 pair speakers)
Input Impedance:	10 kohms
Power Requirements:	+24VDC 660mA peak
CAT-5 Connections:	RJ-45
Dimensions (in-wall):	1.75"W x 2.875"H x 1.75"D (45x73x45mm)
Weight:	5.5oz. (160g)

CONNECTION INSTRUCTIONS FOR A-K6L. REFER TO NUMBERED DIAGRAM ON THE RIGHT

1 RJ-45 Connector for CAT-5 Connection

The RJ-45 input provides a connection for the CAT-5 cable from an A-BUS hub/controller to receive an audio signal, passthrough IR and power over the CAT-5 cable. Use the T568A wiring standard. The recommended maximum length for standard CAT-5 cable is 150 feet.

Before connecting the A-K4, disconnect the power supply from the A-BUS hub/controller and disconnect the Status power supply if used.

2 Line Out Connector for External Amplification

The Line Out provides a variable line-level audio output connection for an external amplifier or powered subwoofer. An amplifier provides more power to a large listening area, and a powered subwoofer adds extended bass response.

Use 22AWG four conductor, two-pair twisted shielded cable to connect to the Left positive (+) and negative (-), and Right positive (+) and negative (-) screw down terminals on the back of the A-K4.

Terminate the four conductor two-twisted pair shielded cable to the rear solder lugs of a wall plate fitted with two RCA jacks on its front. Terminate the shield at the Right negative (-) or Left negative (-) ring of the solder lugs. RCA cables can be used to connect the amp or subwoofer to the wall place for audio signal feed.

3 Speaker Output Connector for Speakers

The Speaker Output connections provide speaker-level audio output for a pair of 8-ohm speakers. The screw-down terminals accepts up to 16 gauge speaker wire.

4 Source Mode Jumper for Single/Multisource

The single/multisource jumpers set the A-K4 to be used with either single- or multi-source A-BUS hubs/controllers. The jumpers and pins are located under the faceplate on the right side of the keypad (facing front).

The pins are jumpered to select between 1, 4 and 6 sources. 1 source = no jumper; 4 sources = top two pins jumpered; 6 sources = bottom two pins jumpered.

5 Status Jumper for Status LED Enable/Disable

The Status option provides visual indication when source equipment is powered on. With this option enabled, the status LED shows green on the keypad when the system is on (keypad can be on or off).

To enable the Status LED, locate the status pins on the right side of the keypad under the faceplate. Place the status jumper over the bottom two pins to enable the status LED.

Note: Amplified keypads are shipped with the Status LED option disabled (default).

Status function and operation:

When the source is powered on, the Status circuit is powered by 12VDC and turns the keypad's status LED to green. This indicates to the user that the source is on and ready to receive remote control commands.

When the source is powered off (remotely or manually), it shuts off the 12VDC Status power connected to it, and turns off all the interfaces connected to the controller (green LED off).

6 Gain Control for Maximum Levels

The two rotary trim potentiometers on the side of the A-K4 provide adjustment of audio gain. These are used to set the maximum allowable volume for the left and right speakers connected to the A-K4.

7 Keypad Connection to A-C68 Controller

Each keypad connects to a Keypad Output port on the back of the A-C68 controller. Connections are made using CAT-5 cable with an RJ-45 connector.

The Keypad Ports are located on the back of the A-C68 on the left. Connections at the Keypad Ports are made with RJ-45 connectors using T568A CAT-5 cable configuration. CAT-5 cable length should be no longer than 150 feet from controller to keypad.

If connecting A-K4 or A-K6L keypads to the A-C68, the keypad dip switches on the front programming center must be set in the DOWN position. For other A-BUS keypad connections, the dip switches must be set in the UP position. Dip switch numbers correspond to the keypad ports.

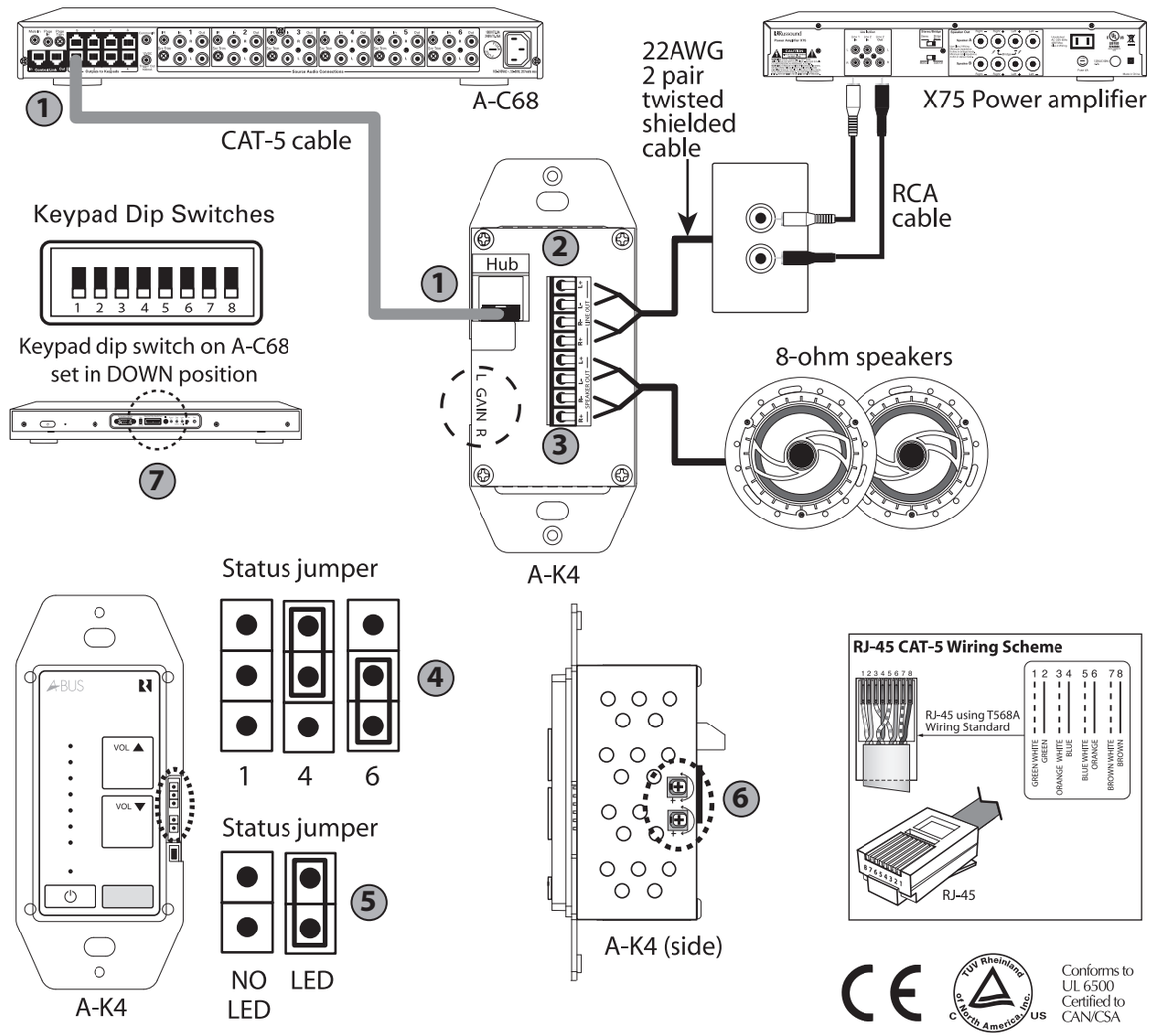
For a clean installation when wiring from a Keypad Port, use an RJ-45 CAT-5 patch cable to connect from the keypad port to an RJ-45 wall plate (optional). Using the same RJ-45 T568A CAT-5 wiring configuration, use CAT-5 from the RJ-45 wall plate to the keypad.

8 Installation

Check all connections and test the system's operation before installing the A-K4 into the wall. Using the included hardware, install the A-K4 into a standard UL/CSA single-gang electrical J-box.

CONNECTION DIAGRAM FOR A-K4. REFER TO NUMBERED INSTRUCTIONS ON LEFT. DIAGRAM NOT TO SCALE.

NOTE: Use caution when connecting speaker wires, as shorting between terminals will cause damage to the digital amplifier and void the warranty.



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of or more of the following measures: reorient or relocate the receiving antenna; increase the separation between the equipment and receiver; connect the equipment into an outlet on a circuit different from that to which the receiver is connected, or consult the dealer or an experienced radio/TV technician for help. This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.